NWG/RFC #302
NIC 9074

UCSB Computer
Research Laboratory
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8 February 1972

Posted 9074

Rcvd 25Feb72

EXERCISING THE ARPANET

Questions

1. Can a technically competent person, initially uninformed as to network operation and naive as to the capabilities of various time-shared terminal systems attached to the Network, be able to develop problem solving competence at server sites on the ARPANET?

2. What inherent user problems exist that complicate such adaptation?

3. Once proficient in the use, what aspects of the various sites limit the usability and what modifications should be considered at both server and user sites to meet various needs?

4. Should a user select a given site for composing and editing all of his files for subsequent transfer to other sites for processing or should he learn to compose and edit at each of the sites doing his processing?

5. What are the problems in starting cooperating processes at several sites? How does a user control such processes?

Obtaining the Answers

Under the direction of UCSB Professor James Howard, a test group of 14 graduate students was formed to pursue the questions above, and any other aspect of ARPANET operation that they might uncover.

The test group has been given access to the 16 console On-Line System classroom in the E.E. Department at UCSB. The 16 consoles produce graphic and alphanumeric displays and are tied into the UCSB Host 360-75 which gains them access to the network. Old style Culler-Fried keyboards are being used which provide a limited key set. Jim White has managed to program around most of the protocol problems brought about by these keyboards, but some still remain.

Seminars were given to the test group to familiarize them with software and hardware aspects of the ARPANET, the local NIC file has been made available to the group, and the group has been allowed to sign onto the Network to pursue any available system.

Following the initial period of two weeks, during which the group developed some familiarity with the network, the test group has been divided into working groups with emphasis as follows:

Patric Timlick	BBN-TENEX
Dave Stearns	BBN-TENEX B
John Pickens	SRI-ARC (NIC)
Doug Beaubien	
Dave Whittington	MIT-MULTICS
Richard Haraguchi	MIT-DMCG
Maria deGraaf	
Richard Melton	
Su Sung Won	

Ronald Varekamp	UCLA-CCN	HARV-10
Jeoff Benson	UCLA-NMC	UTAH-10
Hasan A. El. Hasan	RAND-CSG	LL-67
George Engelberg		
Rodney Skinner		

Some Initial Results

The first real encounters with the ARPANET at large produced a series of questions and comments. Test group comments are itemized below with additional comments by the author *(Italicized)*. We plan subsequent reports on a periodic basis.

1. We find that we need further information about access to the NCPs at various sites. User manuals from the sites might provide this. *(Site response is solicited)*

2. We sometimes cannot sign into UCLA-NMC directly from UCSB, but can do so readily by way of BBN. *(Protocol?)*

3. After running a Fortran or PL-1 program at some net location we can only display the results on our consoles but cannot store them as files. *(UCSB programming need?)*

4. When communications break down, how can a user be assured that he is logged out of some remote site? *(Need for automatic log-out?)*

5. How do we make contact with programmers at other sites to develop cooperative programs for file transfer, etc? *(Jim White?)*

6. Is there a best time of day for operation at each site? Should contact be made with the site operator prior to user sessions? *(Server sites please comment)*

7. UCLA-NMC has assigned a separate user identification for test group use. Would other sites prefer to do likewise? *(Comments?)*

8. Is there information regarding uses made of the various time shared systems by internal users at each site? Does a bibliography exist to allow contact with such users? *(Check the Resource Notebook)*

9. MIT-DMCG and BBN provide very good user service, especially the site survey. Also these sites have good responses to define events. Can UCSB provide local users with similar information? *(Jim White?)*

Responce to RFC 302

28-Feb-72
Posted

Send UCSB (Roland Bryan)

(1) copy of NCP DOC (SEX 25-3)

(2) Tell UCSB of logfile errors

(3) UCSB local problem

(4) Policy of server

(5) call technical Liason about programmer contact

(6) call Technical Liason about hoovs

(7) It is cheap

(8) Resources Notebook

(9) UCSB local

Did they get a Public Program Collection
(Referred to NIC.)

Taken care of by Ari.

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